

State of Alaska
Department of Health and Social Services
Division of Public Health
Section of Epidemiology

Zika Action Plan

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Alaska Zika Action Plan Summary

Updated November 15, 2016

Overview

The Alaska Zika Action Plan establishes guidance for state and local agencies in preparing for and responding to the spread of Zika virus. The plan describes preparation activities, as well as activities that would be implemented in response to specific, triggering events. Response activities are grouped into risk phases based on the Centers for Disease Control and Prevention (CDC) guidelines and are titled: *Preparation, Mosquito Season, Competent Vector Found in Alaska, Confirmed Local Transmission, and Widespread Transmission in One or More Areas of Alaska*.

Planning and response activities address:

- Epidemiology, clinical guidance, and surveillance;
- Laboratory testing;
- Vector surveillance and control;
- Communications with the public, women who are pregnant or could become pregnant, other at-risk groups, and healthcare providers; and
- Blood product safety.

Current Status

Alaska's statewide surveillance system for human Zika infection has been established. It involves collaboration between clinicians, the Alaska Section of Epidemiology, the Alaska State Public Health Laboratory, and the Centers for Disease Control and Prevention (CDC). The two competent mosquito vectors for Zika transmission (*Aedes aegypti* and *Aedes albopictus*) are not present in Alaska and are not likely to extend their territories to these northern latitudes. Therefore, the Alaska Section of Epidemiology anticipates Zika cases in Alaska will be travel-associated or sexually transmitted. The State of Alaska does not regularly conduct vector surveillance.

The Alaska Section of Epidemiology Infectious Disease Team members provide guidance to clinicians, women who are pregnant or could become pregnant, those at risk of Zika exposure due to travel in or from Zika-affected areas, and the general public. This guidance includes information about Zika virus, complications of Zika infection, indications for testing, and prevention strategies.

Testing is available through the Alaska State Public Health Laboratory and CDC. Testing has become recently available at commercial labs. Testing at commercial laboratories may complicate case investigation, since tests performed in that setting may not meet CDC criteria for testing or may not be conducted in the appropriate time frame to produce accurate results.

The number of tests performed is likely to increase significantly as the disease spreads in the United States.

The Alaska Division of Public Health will continue to conduct disease surveillance, offer Zika virus testing, and provide guidance and education to healthcare providers and the public. However, additional disease prevention strategies (e.g., vector mitigation and eradication) will remain in the planning phase until such time as Alaska's climate is able to support a competent vector for Zika virus.

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Introduction

The Alaska Zika Action Plan establishes guidance for state and local agencies in preparing for and responding to the spread of Zika virus infection. This plan outlines the surveillance systems currently established for monitoring human illness. This plan also outlines interventions that would be implemented in response to specific, triggering events, such as migration of a competent vector species to Alaska. Surveillance is conducted in cooperation with healthcare providers, the Alaska State Public Health Laboratory, and the Centers for Disease Control and Prevention (CDC).

This plan describes:

- Public health and emergency management concepts and structures under which the Alaska Section of Epidemiology will operate.
- Roles and responsibilities of federal, state, and local agencies.
- Disease surveillance, emergency management, laboratory response, and communications activities, based on vector and disease status.
- Processes of ensuring cooperation between involved agencies and facilities.

Zika Virus Background

Zika virus disease (Zika) is a viral illness that is spread to people primarily through the bite of infected *Aedes aegypti* and *Aedes albopictus* mosquitoes. Zika infection can also occur through sexual transmission and through vertical transmission from a mother to an unborn baby. The most common symptoms of Zika are fever, rash, joint pain, and conjunctivitis (red eyes). The illness is usually mild. Up to 80% of those infected are asymptomatic. When symptoms occur, they typically last several days to a week and they develop 3-14 days after being bitten by an infected mosquito. People usually do not become sick enough to go to the hospital, and they very rarely die of Zika. Once a person has been infected, he or she is likely to be protected from future infections.

Zika virus was first discovered in 1947 and is named after the Zika Forest in Uganda. In 1952, the first human cases of Zika were detected and since then, outbreaks of Zika have been reported in tropical Africa, Southeast Asia, and the Pacific Islands. Zika outbreaks have probably occurred in many locations. Before 2007, at least 14 cases of Zika had been documented, although other cases were likely to have occurred and were not reported. Because the symptoms of Zika are similar to those of many other diseases, many cases may not have been recognized.

Zika infection during pregnancy has been linked to fetal loss and the development of birth defects involving brain development, such as microcephaly. Zika also appears to increase the risk of Guillain-Barré Syndrome, a neuromuscular illness.

In areas where Zika is circulating, mosquito control and avoidance of mosquito bites are the only practical methods of protecting people from mosquito-borne Zika infection. Avoidance of

unprotected sex when the virus is in the body can prevent sexual transmission. Treatment for Zika is supportive. There is no vaccine, although efforts are being made to develop one. Actions to protect pregnant women, women considering pregnancy, and their partners is emphasized in this document because the clinical impact of Zika infection appears to be minimal for non-pregnant individuals but devastating for developing fetuses.

Zika Virus Risk Phases

A phased response to the risks of arboviruses has been found to be effective with other diseases and in other states. Activities in a community are driven by the time of year, mosquito populations, presence of arboviruses in mosquitoes or other hosts, and human arboviral cases. This plan groups response activities into the risk phases established by CDC (Table 1) and generally follows the CDC guidelines for each phase (Table 2).

Table 1: CDC Zika Virus Risk Phases

Stage	Phase Level	Transmission Risk Category
Pre-incident	0	Preparedness: Vector present or possible in the state.
	1	Mosquito Season: <i>Aedes aegypti</i> or <i>Aedes albopictus</i> mosquito biting activity. Introduced travel-related, sexually, or other bodily fluid transmitted cases.
Suspected/Confirmed Incident	2	Confirmed Local Transmission: Single, locally-acquired case, or cases clustered in a single household and occurring <2 weeks apart.
Incident/Response	3	Confirmed Multi-Person Local Transmission: Virus illnesses with onsets occurring ≥2 weeks apart but within an approximately 1 mile (1.5 km) radius.

Table 2: Alaska Zika Virus Risk Phases

Phase Level	Transmission Risk Category
0	Preparedness: Vector not present but possible in the state.
1	Mosquito Season: Mosquito biting activity. Introduced travel-related, sexually, or other bodily fluid transmitted cases.
	Competent Vector Found in Alaska: Presence of <i>Aedes aegypti</i> or <i>Aedes albopictus</i> mosquitoes confirmed in the state.
2	Confirmed Local Transmission: Single, locally-acquired case, or cases clustered in a single household and occurring <2 weeks apart; or virus illnesses with onsets occurring ≥2 weeks apart but within an approximately 1 mile (1.5 km) radius.
3	Widespread Transmission in One or More Areas of Alaska: Virus illnesses with onsets occurring ≥2 weeks apart within one or more areas of Alaska in >1 mile (1.5 km) radius.

PURPOSE AND AUTHORITIES

Purpose

The purpose of the Alaska Zika Action Plan is to lessen the impact of Zika virus on the residents of Alaska by providing a guide for the Alaska Section of Epidemiology for detection and response. This plan focuses on elements that are unique to a Zika virus outbreak. Whenever response is typical of the response to any non-communicable disease or other public health emergency, this plan refers to the appropriate section of the Alaska Department of Health and Social Services (DHSS) Emergency Operations Plan (EOP).

Authorities

The Alaska Department of Health and Social Services is provided with the authority to implement this action plan under Alaska Statutes, Title 18: Health, Safety, and Housing; specifically, Chapter 15 Disease Control and Threats to Public Health.

Table 2: Selected Legal Authorities

Alaska Statute	Title
AS 18.15.355	Prevention and Control of Conditions of Public Health Importance
AS 18.15.362	Acquisition and Use of Identifiable Health Information; Public Health Purpose
AS 18.15.375	Epidemiological Investigation

SITUATION AND ASSUMPTIONS

Situation

Mosquitoes are the vector for Zika virus and can infect humans through their bite. There are over 3,000 different species of mosquitoes throughout the world; approximately 175 of those species occur in the United States, with 35 species occurring in Alaska. *Aedes albopictus* and *Aedes aegypti* are documented to carry Zika, and neither of these species has been identified in Alaska. These species are found in other parts of the United States but not in the Pacific Northwest. Further studies are currently underway to identify additional species that could potentially serve as a vector for Zika virus in the Americas.

According to the CDC, prevention and control of Zika is most effectively accomplished through integrated vector management including:

- Management of standing water and minimizing mosquito populations
- Using larvicides to minimize mosquito hatching early in the season
- Active human and mosquito surveillance for Zika virus infection
- Mosquito control with adulticides

- Minimizing public exposure to mosquitoes and substances used for their control

These programs are not intended to eliminate mosquitoes entirely, but rather to reduce their numbers in key areas and therefore reduce the risk of disease transmission. Currently, Alaska does not have an organized vector control program.

Zika was first reported in Alaska in 2007, in an Alaska resident who had traveled to the island of Yap. Since that time, only one other case has been diagnosed in Alaska. The infection occurred in an Illinois resident who had been traveling in Central America prior to his arrival in Alaska.

In 2015-16, Zika spread in a fast pace in the Americas. Puerto Rico reported its first human case of locally-acquired Zika infection in late 2015 and more reports of confirmed cases in humans have occurred in travelers throughout the United States since then.

In addition to transmission through mosquito bites, Zika has been shown to be transmitted via sexual intercourse, vertical transmission from pregnant mothers to fetuses, blood transfusion, and organ transplant. The disease potentially affects all ages and both sexes. Zika virus usually remains in the blood of an infected person for one to two weeks, but it can be found longer in some people, particularly in semen. Once a person has been infected, he or she is likely to be protected from future infections.

Assumptions

- The Alaska Section of Epidemiology is the lead state agency for Zika surveillance.
- The Anchorage Department of Health and Human Services has jurisdiction in the Municipality of Anchorage for public health.
- The Alaska State Public Health Laboratory (ASPHL) tests suspected human cases for Zika virus infection, using polymerase chain reaction (PCR) testing to detect acute disease. Testing began in June 2016. Positive specimens are considered final. Negative specimens will be sent to a CDC referral laboratory for serologic testing.
- IgM serology to detect infection 2-12 weeks after onset of symptoms or in asymptomatic pregnant women will be processed at a CDC referral lab.
- There is no vaccine for humans. There are no approved antiviral treatments for Zika Virus.
- Zika transmission to humans can be lessened by decreasing the mosquito population.
- People can further reduce their risk of contracting Zika by preventing mosquito bites and avoiding sexual interactions with infected persons.
- Sharing this information with health care providers and the public can lead to behaviors that decrease the risk of Zika infection.

CONCEPT OF OPERATIONS

Annex F, Public Health and Medical Services, Base Plan contains detailed information on incident management, federal, state and local response systems. In the case of a Zika virus outbreak, the Alaska Section of Epidemiology would lead the response with support from the Alaska Section of Public Health Nursing and the Alaska Section of Rural and Community Health Systems, and in conjunction with public and private health care partners around the state.

Operational Priorities

- Quickly diagnose Zika in humans.
- Reduce transmission of the virus from mosquitoes to humans by avoiding exposure to mosquitoes among Alaskans, particularly pregnant women and their partners, traveling to Zika-affected areas.
- Mitigate mosquito populations if a competent vector is identified in Alaska.
- Limit exposure of persons ill with Zika to Alaska mosquitoes to prevent the introduction of Zika into the local mosquito population.
- Mitigate mosquito populations and avoid exposures to mosquitoes if Zika becomes established in the local mosquito population.
- Share information through multiple channels to promote behaviors that limit the spread of Zika through mosquitoes and through sexual transmission.

Activation of the Alaska DHSS Emergency Operations Center (EOC)

Decisions regarding Zika control measures will be based on the evaluation of surveillance data. The Alaska Department of Health and Social Services Commissioner, in consultation with the Department of Health and Social Services Chief Medical Officer and State Epidemiologist, will decide the level of activation of emergency management systems based on a number of risk factors:

- Environmental conditions
- Adult mosquito vector abundance
- Reported human cases of Zika disease
- Virus isolation rates in tested mosquitoes
- Proximity of detected virus activity to populated regions (especially urban or suburban)

Alaska DHSS EOC

If the Zika risk phase reaches confirmed local transmission or widespread transmission, Alaska Department of Health and Social Services staff will likely activate the Emergency Operations Center (EOC) to coordinate public health response. The EOC may be activated if a competent vector is found in Alaska.

ROLES AND RESPONSIBILITIES

This section outlines the roles and responsibilities of the federal, state, and local agencies involved in Zika surveillance and response.

Federal

Centers for Disease Control and Prevention

Preparation Phase

- Provide national surveillance data to state health departments
- Issue guidance, with updates as needed, on case definitions, prevention measures, and clinical management

Response

- Assist in the laboratory confirmation of human Zika cases
- Provide expertise regarding the management of human Zika cases
- Provide consultation to state and local agencies if epidemic conditions exist
- Provide additional funding to state health departments when there is an outbreak and an emergency has been declared

State

Alaska Department of Health and Social Services, Division of Public Health

Phase 0 - Preparedness

All Staff

- Participate in preparing plans
- Participate in exercises
- Participate in appropriate training

Alaska Section of Epidemiology

- Develop and maintain investigative guidelines that include testing guidance and approval process
- Maintain a database of all human specimens tested
- Post updated Zika virus guidance on the Alaska Section of Epidemiology website: <http://dhss.alaska.gov/dph/Epi/id/Pages/Zika.aspx>
- Send surveillance results to the CDC via ArboNet (or other established transport mechanisms) and communicate regularly on surveillance and control activities
- Participate in the U.S. Zika Pregnancy Registry
- Immediately notify local health departments (Anchorage), tribal health organizations and State Public Health Centers when evidence of viral activity in humans is found in

- a jurisdiction
- Provide results to the jurisdictions of cases tested
- Communicate and assist with press releases
- Produce public information materials
- Act as subject matter experts for training
- Assess partners who may be conducting mosquito surveillance

Alaska State Public Health Laboratory

- Test human samples for evidence of Zika virus infection through reverse transcription polymerase chain reaction (PCR) or forward samples to CDC reference laboratory for IgM serology as appropriate
- Develop and refine testing guidance in consultation with the Section of Epidemiology (see <http://dhss.alaska.gov/dph/Epi/id/SiteAssets/Pages/Zika/Alaska%20Lab%20Zika%20Testing%20info%2018%2017.pdf>)

Section of Rural and Community Health Systems

- Coordinate public health planning, response, and recovery
- Assist with health department planning
- Coordinate the design of exercises

Public Information Office

A public information officer for the Department of Health and Social Services in consultation with epidemiologists and physicians within the Division of Public Health will:

- Compile contact information for state, local and tribal public health spokespeople
- Prepare messages that raise awareness of Zika surveillance and protection measures for state, local, and tribal public health, hospitals, businesses, individuals and families, community organizations, and schools—with a focus on mosquito avoidance for people traveling outside of Alaska
- Prepare fact sheets, FAQs, and other communication materials on Zika for distribution to health care providers, other first responders, the media, and the public in the event of a Zika outbreak
- Participate in communication planning and exercises with Zika emergency response partners

For more information, see *Annex B: Risk Communication Plan* of the Alaska Department of Health and Social Services *Emergency Operations Plan*.

Phase 1 - Mosquito Season

All Staff

- As above under Preparation Phase

Section of Epidemiology

- As above under Preparation Phase
- Determine how to augment mosquito surveillance particularly for *Aedes aegypti* and *Aedes albopictus*

Alaska State Public Health Laboratory

- As above under Preparation Phase
- Assess testing demand and laboratory capacity
- Respond as needed to ensure priority testing completed in a timely fashion

Section of Rural and Community Health Systems

- As above under Preparation Phase

Public Information Office

- As above under Preparation Phase
- Intensify messaging to public about mosquito avoidance in areas of the world where competent vectors might be found

Phase 1 - Competent Vector Found in Alaska**All Staff**

- Continue as above
- Convene briefings
- Implement control and communications measures

Alaska Section of Epidemiology

- Continue as above
- Revise and disseminate guidance to healthcare providers to promote intensified surveillance for Zika compatible illness, particularly Guillain-Barré or symptoms of illness during pregnancy
- Request assistance from entomological experts about the likelihood that the vector could establish itself in Alaska, promote additional mosquito surveillance, and establish a more comprehensive and permanent trapping program

Alaska State Public Health Laboratory

- Continue as above

Section of Rural and Community Health Systems

- Continue as above
- Provide planning, logistics, and, as needed, operation support to facilitate missions of the Section of Epidemiology, and other public health responders

Public Information Office

- Continue as above
- Activate expedited document approval process
- Consider activating a Joint Information Center (JIC) with local health departments, tribal health organizations, and healthcare centers
- Issue press release regarding evidence for a competent vector in Alaska, its implications for public health, and steps public can take to mitigate risk

Phase 2 - Confirmed Local Transmission**All Staff**

- Continue as above

Section of Epidemiology

- Continue as above
- Develop and intensify control efforts for vectors with a focus on mitigation and eradication in areas around known, locally acquired cases
- Integrate measures from CDC Zika-endemic guidance into Alaska vector control activities

Alaska State Public Health Laboratory

- Continue as above

Section of Rural and Community Health Systems

- Continue as above
- Coordinate with other state and federal agencies on response-related ESF-8 (Public Health and Medical) issues
- Consult with U.S. Department of Health and Human Services (HHS) Region X, as needed, to address response needs not met by state resources

Public Information Office

- Continue as above
- Activate JIC to ensure information flow to local health departments, public health centers, tribal health organizations, medical providers, veterinarians, and other health care partners
- Issue press release notifying the public of confirmed local, mosquito-borne transmission in Alaska, its implications for public health, and steps public can take to mitigate risk
- Incorporate messaging from CDC Zika-endemic guidance regarding family planning
- Reinforce messages about mosquito avoidance and mitigation in the home environment
- If widespread spraying of pesticides is planned, provide information on the chemicals used and the application schedules

- Distribute fact sheets, FAQs, and other informational materials via the news media, HAN, the JIC, and the public health emergency broadcast fax system

Phase 3 - Widespread Transmission in One or More Areas of Alaska

All Staff

- Continue as above
- Ensure communication to partners and public about areas of emerging infection

Section of Epidemiology

- Continue as above
- Monitor mosquito and human Zika surveillance data to identify areas of emerging infection
- Send technical information about Zika infection, specimen collection, and reporting requirements to local health departments, public health centers, hospitals, clinicians, and veterinarians
- Communicate technical information to DHSS and DPH Leadership, and Public Information Officers
- Work with local public health centers to target aggressive mosquito mitigation efforts in areas of emerging infection

Alaska State Public Health Laboratory

- Continue as above

Section of Rural and Community Health Systems

- Continue as above
- Consult with HHS Region X, as needed, to address response needs not met by state resources
- Coordinate with other DHSS sections, local health departments, public health centers, and other health care partners on appropriate interventions

Public Information Office

- Continue as above
- Issue press release notifying public of areas with local mosquito-borne transmission, implications for public health, and strategies for mosquito avoidance and mitigation
- Work with Local and Tribal health departments to push out risk communication and prevention messages for residents of known affected areas, as well as counties adjacent to the affected areas; do this in the context of sharing these messages more broadly throughout the state

Recovery

All Staff

- Participate in an After-Action Report and work on necessary improvements

Section of Epidemiology

- Continue to be subject matter experts
- Continue surveillance and work with Public Health Veterinarian and Public Information staff
- Continue work on vector surveillance and control
- Continue reporting data to health care partners

Alaska State Public Health Laboratory

- Continue above

Section of Rural and Community Health Systems

- Continue above, plus
- Support recovery activities within tribal and local public health

Public Information Office

- Periodically share risk communication/prevention messages, as indicated by changes in Zika activity, geographic spread, and new information about pathogenicity and modes of transmission

Local

Municipality of Anchorage, Department of Health and Human Services

The Anchorage Department of Health and Human Services (DHHS) does not have a Zika surveillance system separate from the State. DHHS does not have a mosquito control program or vector control agency.

Preparation Phase

- Refer suspect Zika cases to the Alaska Section of Epidemiology
- Assist to educate the public in their jurisdiction
- Keep the community informed of local Zika activity by various media channels
- Participate in decisions regarding vector control measures
- Identify organizations with mosquito control capabilities within their jurisdiction and determine if adequate capability exists

Response

- Assist Alaska DPH in the investigation of cases
- Assist Alaska DPH in active surveillance once human cases have been identified

- Participate in emergency response
- Based on the number of human cases, declare a local emergency after consultation with municipality emergency managers, Alaska DHSS Chief Medical Officer, and State epidemiologists

Hospitals and Health Systems

Clinicians must report suspected or confirmed human cases of Zika within 5 days to the Alaska Section of Epidemiology

BLOOD SUPPLY IN ALASKA

The Blood Bank of Alaska is the main source of blood and blood products in Alaska. It has four donation centers (two located in Anchorage, one in Wasilla, and one in Fairbanks) and serves 21 hospitals across the state, including every military and native hospital. In the event of a declared disaster, or should airspace close, the Blood Bank of Alaska is responsible for the blood supply to all hospitals in the State of Alaska, in partnership with State Emergency Response Authorities. At the start of the Zika epidemic in the Americas, the Blood Bank of Alaska began deferring donors who had traveled to areas with active Zika transmission to ensure the safety, purity, and potency of the blood supply.

In August 2016, FDA issued revised guidance regarding the testing of blood products for Zika virus and advised the implementation of Zika virus testing for all blood donations. Memorial Blood Center, which performs blood testing for the Blood Bank of Alaska, will begin Zika virus testing on November 14, 2016. Because there are no FDA-licensed tests for Zika virus at this time, Memorial Blood Centers will be using one of two Investigational New Drug (IND) tests currently available. New Standard Operating Procedures (SOPs), which include the Zika virus screening protocols, will go into effect at the Blood Bank of Alaska on November 16, 2016.

VECTOR CONTROL

The State of Alaska and the Municipality of Anchorage do not have established vector control programs. In Alaska, the U.S. Department of Defense is the only agency currently performing vector surveillance and vector studies. This work is conducted at Joint Base Elmendorf-Richardson (JBER). In the event that a competent vector is found in Alaska, the following vector control interventions may be necessary.

Vector Control in the Preparation Phase

- Gather, collate, and interpret regional weather data
- Map mosquito habitat and location of vector species
- Monitor abundance of immature and adult mosquitoes
- Collect and identify mosquitoes and report new species identified in a specific area to

- health officials and healthcare partners in that area
- Collect and submit mosquito samples for virus isolation
- Conduct routine control of immature mosquitoes
- Conduct control of adult mosquitoes when needed, emphasizing areas where surveillance indicates human risk
- Test for pesticide resistance in areas where pesticides have been applied and pesticide resistance is suspected
- Educate the public on mosquito avoidance
- Report surveillance findings to healthcare partners

Vector Control in the Response Phase

- At first confirmation of Zika activity in mosquitoes in a specific area, issue a Zika advisory for that location in collaboration with any local health care authorities
- Coordinate with local health departments during emergency response
- Intensify larviciding and adult mosquito control when needed
- If large-scale adulticiding is required, notify local health departments, public health centers, government leaders, and tribal leaders in treatment areas
- Monitor efficacy of spraying on target mosquito populations

Table 3: Insecticides Targeting Larval Mosquitoes

Active Ingredient	Chemical Type
<i>Bacillus thuringiensis israelensis</i>	Microbial
<i>Bacillus sphaericus</i>	Microbial
Spinosyn	Microbial
Oils	Surface film
Novaluron	Insect growth regulator
Methoprene	Insect growth regulator
Temephos	Organophosphate

Table 4: Insecticides Targeting Adult Mosquitoes

Active Ingredient	Use	Chemical Type
Deltamethrin	Space spray/residual spray	Pyrethroid
Etofenprox	Space spray	Pyrethroid
Permethrin	Space spray	Pyrethroid
d-Phenothrin (Sumethrin)	Space spray	Pyrethroid
Pyrethrins/Pyrethrum	Space spray	Pyrethroid
Chlorpyrifos	Space spray	Organophosphate
Malathion	Space spray	Organophosphate
Naled	Space spray	Organophosphate
Alpha-cypermethrin	Residual spray	Pyrethroid
Bifenthrin	Residual spray	Pyrethroid
Lambda-cyhalothrin	Residual spray	Pyrethroid
Tau-fluvalinate	Residual spray	Pyrethroid
Imidacloprid/beta-cyfluthrin	Residual spray	Neonicotinoid/Pyrethroid

VULNERABLE POPULATIONS

The following populations are at elevated risk for contracting Zika in areas where Zika virus is circulating in mosquito populations:

- People with outdoor exposure during work or recreational activities
- Homeless people with extensive outdoor exposure and limited financial resources to purchase protective clothing and insect repellent
- People who live in residences lacking window screens

The following populations are at increased risk for incurring more serious health consequences from Zika virus infection:

- Pregnant women (risk to developing fetus)
- Immunocompromised patients

PLAN MAINTENANCE

This plan will be revised every year, with specific attention to lessons learned from prior exercises and emergencies, and as needed due to changing guidance from CDC or other public health authorities.

REFERENCES

The links in this section were correct as of October 2016.

Alaska DHSS Emergency Operations Plan

<http://dhss.alaska.gov/dph/Emergency/Documents/prepared/EOP.pdf>

Alaska Public Health Alert Network

<http://dhss.alaska.gov/dph/Epi/Pages/phan/default.aspx>

Alaska Public Health Statutes

<http://www.legis.state.ak.us/basis/Search.asp?session=29&search=Title+18>

Alaska Section of Epidemiology

Zika Virus: <http://dhss.alaska.gov/dph/Epi/id/Pages/Zika.aspx>

Blood Bank of Alaska

<http://www.bloodbankofalaska.org/>

Centers for Disease Control and Prevention

Zika Virus: <http://www.cdc.gov/zika/>

U.S. Department of Defense, Military Health Systems

Mosquito Control and Prevention Toolkit:

http://www.defense.gov/Portals/1/features/2016/0916_national-preparedness/MHS_Comms_Mosquito-Borne_Illnesses_Toolkit_7-27-16.pdf

U.S. Environmental Protection Agency

Pest Management: <https://www.epa.gov/safepestcontrol>

ACRONYMS AND GLOSSARY

Acronyms

ASPHL	Alaska State Public Health Laboratory
CDC	Centers for Disease Control and Prevention
DHHS	Anchorage Department of Health and Human Services
DHSS	Alaska Department of Health and Social Services
DPH	Alaska Division of Public Health
EOC	Emergency Operations Center
HAN	Health Alert Network
HHS	U.S. Department of Health and Human Services
JIC	Joint Information Center
SRCH	Alaska Section of Rural and Community Health Systems
SOE	Alaska Section of Epidemiology
ZIKA	Zika Virus

Glossary

Adulticide. The application of chemicals to kill adult mosquitoes.

Antibodies. Large proteins used by the immune system to identify and neutralize foreign objects such as viruses. Each antibody recognizes a specific **antigen**.

Antigens. Substances that are recognized by the immune system and induce an immune reaction.

Arbovirus. [arthropod-borne virus] A virus that uses arthropods, such as mosquitoes, as vectors for transmission.

Arthropods. Organisms having a hard, jointed exoskeleton and paired jointed legs. Many species of are important medically as parasites or as vectors of organisms capable of causing disease in humans.

Emergency Support Function (ESF). A functional area of response activity established to facilitate the delivery of federal assistance required during the immediate response phase of a disaster to save lives, protect property and public health, and to maintain public safety.

Health Alert Network (HAN). A system used to communicate health and emergency messages to health care providers and public health partners.

Joint Information Center (JIC). A facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media.

Larvicide. The application of chemicals or biological agents to kill mosquito larvae or pupae.

Surveillance. The collection, analysis, and dissemination of data about a disease.

Vector. An invertebrate animal (e.g., tick, mite, mosquito) capable of transmitting an infectious agent among vertebrates.

RECORD OF CHANGES

Date	Summary of Change
11/2016	Alaska Zika Action Plan developed.
2/7/2017	Updated link to Zika testing